Institution/ Department Name: Manipal School of Architecture and Planning		
Key Indicator - 7.2 Best Practices (NAAC Criterion)		
Metric No.		**Attachments**
7.2.1	***Describe at least two institutional best practices***	
QIM	File Description • Link for any additional information • Upload any additional information	**1) Online Thesis Repository -** Access to online resources: Free repository of thesis, dissertations, and other academic documents of the students, coupled with powerful search, organization, and collaboration tools. Thesis and dissertations are an excellent source of in-depth technical information often not published in detail elsewhere which helps to review by the subject area. We can find documents on any topic using keyword search. It enables the Institute community to deposit their preprints, post prints and other scholarly publications using a web interface. **2) Webinar for learning:** Webinar helps in seamless learning and exchange of knowledge Institutional Values and Social Responsibilities. It is a cost-effective tool which allows us to engage an unlimited number of people and reach your target audience in a virtual setting that is dynamic and far more interesting. IALD Student Workshop 2021 titled "Nightscape of Asian cities, now and future", a lighting workshop being held in Japan from February to November 2021. The MSAP team students participating in the IALD workshop includes 32 students from different courses for better participation & cross-fertilization of knowledge. IALD India coordinator – Dr. Amardeep M Dugar, Lighting Research & Design. Faculty Team – Dr. (Prof.) Deepika Shetty, Gowri Shenoy, Akshatha Rao, Rituka Kapur. . An online Guest Lecture by Expert Ms. Krishna Sathish, Fashion Consultant, Diesel Fashion India, Reliance Pvt. Limited, Bangalore on the topic: "Womenswear and Menswear – Product Categories, Product Lines, Merchandising Plan, Client Styling and Fit" for B. Des (FD), 4th Semester and MA (FM), 2nd Semester students through Online mode **3)** Professional Response and Participatory Education: Manipal School of Architecture and Planning helps to explore an environment of holistic preparation, where latent talent is focused on and enriched through the bouquet of competencies with thought-provoking and enriching environments for ensuring the long-term success of all the stakeholders. The well-rounded curricular, co-curricular and extra-curricular processes helps to create highly motivated designers and successful entrepreneurs. Flexibility in the education system for student to pursue academic developmental activities in India and abroad as well as collaborative inter-disciplinary learning. Industry internship as part of the curriculum helps the students to earn real life project experience and the application of the earned knowledge. **4)** Social Sensitivity & Community Enrichment Education: Site visits were organised to sites of architectural importance for acquiring knowledge by rediscovering the heritage and architectural techniques. Economic and ecological sustainability is encouraged amongst the budding designers through the projects. The Fashion Design curriculum also ensures the students explore and document the traditional art forms to inculcate art appreciation and implementation of the same in design projects. Economic and ecological sustainability is encouraged amongst the budding designers through the projects. Involvement of students and faculty socially relevant consultancy projects thus disseminate the knowledge and skills obtained through teaching, learning, research and consultancy for the social benefit thus accomplishing the goal, "Let's connect, let's unite and let's flourish together". Involvement of students and faculty socially relevant consultancy projects thus disseminate the knowledge and skills obtained through teaching, learning, research and consultancy for the social benefit thus accomplishing the goal, "Let's connect, let's unite and let's flourish together". **5)** The Intergovernmental Panel on Climate Change (IPCC) is an intergovernmental body of the United Nations that is dedicated to providing the world with objective, scientific information relevant to understanding the scientific basis of the risk of human-induced climate change, its natural, political, and economic impacts and risks, and possible response options. A total of 22 members from MSAP participated in the Group review, which includes 14 faculties including our Director, Professors, Associate Professors and Assistant Professors and 8 students from M.Arch Urban Design and Development, MSAP. Two chapters were targeted i.e. 8-Urban Systems & Other Settlements & 9- Buildings.
	Format for Presentation of Best Practices	
	1. **Title of the Practice**	
	This title should capture the keywords that describe the practice.	1.IALD Light Workshop 2021 2. Solar Decathlon India
	2. **Objectives of the Practice**	**1. IALD-** 'Enlighten Asia in Japan 2021' A chance to experience and listen to the top lighting designers in Asia. We hope this event gives people an opportunity to explore and understand the future of Lighting in Asia. "Created by and for lighting design professionals, the Enlighten Conferences are a series of educational and networking events. The lighting community comes together to learn, share ideas, and explore solutions with like-minded people who are passionate about light. Intimate by design, the events build meaningful connections and spark thought-provoking discussions with experts who inspire and motivate, moving architectural lighting design into the future." **2. Solar Decathlon India** is an Inter disciplinary competition for undergraduate students from Indian institutions to join forces to combat Climate Change. Two teams (each team of 13 students) from MSAP and MIT participated designing multi-family housing and office building. This helped students stay a step ahead and introduce innovative and affordable market-ready solutions. This competition gave an opportunity for student teams to design net-zero-energy-water buildings, contributing to real projects, while partnering with the leaders in real estate development. This was conducted by the Indian Institute for Human Settlements (IIHS) and the Alliance for an Energy Efficient Economy (AEEE) under the aegis of the Indo-US Science and Technology Forum (IUSSTF). Mr. Prasad Vaidya, Adjunct Professor of MSAP is the Director of Solar Decathlon India. The solutions have resulted in design and technology innovations that will transform buildings, years into the future.
	What are the objectives / intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice (in about 100 words)?	Objectives: a. Read this Competition Guide and form a team, b. Complete the registration form, and selct the faculty lead (Ratna sravya Yandamuri) as faculty advisor from MSAP to lead the teams c. Ensure that all team members complete all mandatory online learning modules, d. Study the resources listed in this guide, e. Identify a Project Partner to select an appropriate project- Tata consultants from bangalore are the project partners for the teams f. Identify industry partnerships for the areas of the competition that need collaboration, g. Consult the Solar Decathlon India website for updates and announcements, h. Design and document your project, in compliance with the requirements listed in this guide, i. Submit all materials before the deadlines. **Outcomes:**Solar Decathlon India contributes to 11 out of 17 Sustainable Development Goals (SDGs). Through their projects, participants increased access of communities to clean energy, water, sanitation and waste management. Their projects increased access to affordable, good quality and resilient housing. Their buildings operate on renewable energy, and use rainwater and treated wastewater to reduce stress on freshwater sources. Their designs also keep inhabitants safe and ensure that critical operations function during disasters.Solar Decathlon India helps students stay a step ahead and introduce innovative, affordable, and market-ready solutions that enable a clean energy transition. This is the resilient and carbon-neutral way forward for sustainable buildings and communities in India. Extreme weather events such as floods and heat-island effects due to Climate Change are becoming more frequent. India's population is very vulnerable to climate change impacts. Meanwhile, the cooling energy demand is expected to double, with 57% contributed by cooling demand in buildings. To contribute to the 1.5°C pathway and India's Nationally Determined Contributions, India must achieve a 50% reduction in building energy demand by 2050. A delay each year results in a huge lost opportunity and adds to the backwardlooking building stock. Net-zero building solutions that are disaster proof, reduce risk to lives and property in the immediate future, while dramatically reducing carbon emissions for decades to come. Solar Decathlon India provides the platform and resources necessary for students to learn and design net-zero buildings and contribute to a sustainable future. They get hands-on experience by developing innovative and affordable solutions for real buildings and learn how to make their solutions market-ready and scalable.
	3. **The Context**	1.IALD Light Workshop 2021
	What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?	1. Explore the future of lighting design with 6 nations - Japan, Korea, Singapore, Thailand, China, and India. Team India represented by the students of MSAP took a journey through the future of lighting in 2050. 2.Teams competing in the Solar Decathlon Design Challenge work in multidisciplinary teams, and optionally with a Design Partner, for one or two academic semesters to prepare creative solutions for real-world issues in the building industry. The competition culminates in the Solar Decathlon Competition Event, where student teams present their designs to a panel of industry experts, discuss design strategies with peers, learn from thought leaders, and connect with industry partners through unique networking opportunities. Winning teams are recognized with awards on the international stage, and winning design projects are also posted on the Solar Decathlon website. Through the vast global Solar Decathlon network, this high-profile competition provides national exposure and recognition for successful teams and collegiate institutions. The Challenge:Student teams design affordable net-zero-energy-water buildings for real building projects by partnering with developers, clients, or others in the real estate sector. Solar Decathlon India introduces innovative, affordable, practical, and market-ready solutions for resilient net-zero buildings. In the 2020-2021 Solar Decathlon India Challenge, participating teams designed buildings in one of the four Divisions: Multifamily Housing Educational Building Office Building Community Resilience Shelter Designs had to comply with byelaws, codes, and standards and strive to meet special requirement of the real estate partner. In the 2020-2021 Solar Decathlon India, participants worked to excel in the following Ten Decathlon Contests: Energy Performance; Water Performance; Resilience; Affordability; Environmental Quality and Comfort; Scalability and Market Potential; Architectural Design; Engineering Design and Operations; Innovation; Presentation
	4. **The Practice**	2.Student teams design affordable net-zero-energy-water buildings for real building projects by partnering with developers, clients, or others in the real estate sector. Projects in the past Solar Decathlons have shown that sustainability can be done in style, and that students can produce high quality work on par with professionals. The solutions have resulted in design and technology innovations that transform buildings, years into the future.Students are encouraged to use different outreach platforms such as social media and print media, to draw public interest and attention to their work. To reach peers and make a mark in academics and research, they could submit their work to peer reviewed journal publications. The Solar Decathlon India organisers provide the necessary guidance/ referral materials to support the teams. b**enifits of challenge:** a.Alumni: Entrants into the first Solar Decathlon India are always be special, and Alumni can one day become pioneers of a new generation of green buildings in India. Join alumni from other parts of the world, build relationships, and exchange knowledge as part of this niche community. b. Career development: As part of the Solar Decathlon India, students gain real-world industry experience while working alongside project partners and implementing their ideas on live projects. The benefits of this are far-reaching and include developing industry connections, gaining exposure to multiple technologies, and being coached by mentors. c. Participation: Team members receive a certificate upon completion of all stages of the competition, and are recognised as Solar Decathlon India Alumni. d. Future Technical Resource Groups: Student cohorts can potentially become part of future Technical Resource Groups, who guide upcoming cadres of students who sign up for Solar Decathlon India
	Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?	
	5. **Evidence of Success**	1.IALD Light Workshop 2021

	Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.	1. Udupi City Proposal by MSAP team voted the No. 1 in popularity poll hosted by IALD Japan  2.weblink of participants interviewvideo from MSAP and MIT after succcedingtheir first phase: https://youtu.be/Z7y7BDxe3ak Faculty conferrence :   Solar Decathlon India
	6. **Problems Encountered and Resources Required**	**Resources:** Webinars In 2020-21, over 25 webinars were conducted by various experts from the field who explained their used case studies from their professions to discuss application of building-science concepts in real life scenarios. The webinars focused on technical aspects, soft skills, and building simulations. Our experts shared their experiences and the do's and don'ts to help participants go deep into the concepts. Technical Resource Group (TRG) The student teams had access to the Technical Resource Group (TRG). The TRG consisted of individuals with expertise in specific areas for making buildings and communities that are net-zero-energy-water-waste, resilient, and affordable. The TRG members participated in Solar Decathlon challenges held in other countries, and brought that valuable experience in mentoring teams in Solar Decathlon India. The TRG provided high-level guidance, pointed out resources, and provided explanations to the teams; however, they did not solve problems for the teams. Building Performance Simulation Software Each participating team was given access to DesignBuilder and Climate Studio software for building performance simulations to evaluate design ideas. Pitch guidance to Project Partners The Solar Decathlon India prepared a handout that participating teams could use to approach Project Partners, explain the benefits they get and clarify their role and commitment. Past submissions Work submitted by teams who have participated in past Solar Decathlons were made available to the teams, who reviewed and referred to these works.
	Please identify the problems encountered and resources required to implement the practice (in about 150 words).	Resources Required: Hight speed Internet facility, Online communication platforms like Microsoft Teams, Audio visual accessories and tools. Problems Encountered: Connetivity issues encountered sometimes due to bandwidth, power issues .
	7. **Notes (Optional)**	
	Please add any other information that may be relevant for	
	Any other information regarding Institutional Values and	